

Impairment of higher brain functions, emotional sphere, and the features of the psychological status of patients with chronic cerebral ischemia

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Abstract

© 2016, International Journal of Pharmacy and Technology. All rights reserved. Objective of this study was to study the features of the higher cerebral functions associated with vascular brain disease. The study included 75 patients aged 51-75 years with chronic cerebral ischemia. Neuropsychological examination was conducted, including an assessment of the emotional sphere and psychological status before and after therapeutic correction. Impairments of memory were detected in 96.0% of patients, attention - 90.0%, somatosensory gnosis - 81.3%, intelligence - 73.3%, acoustic gnosis - 64%, speech - 57.3%, ocular gnosis - 56, 0%, dynamic praxis - 49.3%, writing - 14.7%, counting - 14.7%, and reading 9.3%. The "memorizing emotional words" test showed the significance of the emotional factor: the highest memorizing rate was in emotional words 3.3 ± 0.3 , as compared with neutral words 2.6 ± 0.2 . Holmes and Ray test revealed a stress level of 160 ± 11.64 . The effectiveness of pharmacological and psychological correction was shown in a decrease in the number of patients in terms of higher brain activity, as well as a decrease in the importance of the emotional factor was revealed as the growing remembering ability for neutral words; prior to treatment - 2.6 ± 0.2 , and post treatment - 3.1 ± 0.2 . The study of 51-75-year-old patients showed the greatest changes in the memory, attention, somatosensory gnosis, intelligence, and acoustic gnosis. The decreasing significance of the emotional factor, taking into account the importance of the psychological status using pharmacological and psychological treatment, improves the higher brain functions. This paper deals with the impairments of higher brain functions associated with chronic cerebral ischemia. The analysis of changes in higher brain functions in patients aged 51-75 years has been conducted, the emotional sphere has been studied, and the psychological status has been assessed. The most common changes in the spheres of memory, attention, somatosensory gnosis, intelligence, and acoustic gnosis have been identified. The importance of the emotional factor, as well as the presence of the stress load in the studied group of patients has been shown. Upon completion of the course of pharmacological and psychological treatment, the positive dynamics was admitted in the field of higher brain function, as well as increased cognitive capacity and reduced importance of the emotional factor in the evaluation of the emotional sphere, which has consequently improved the quality of life of patients.

Keywords

Brain, Cognitive disorders, Emotional sphere, Higher brain functions